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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/511,070

10/12/2004

Steven Victor Jones

8765

76237

7590

06/05/2009

Harness Dickey & Pierce, P.L.C.

P.O. Box 828

Bloomfield Hills, MI 48303

EXAMINER

REESE, DAVID C

ART UNIT

PAPER NUMBER

3677

MAIL DATE

DELIVERY MODE

06/05/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/511,070

Applicant(s)

JONES, STEVEN VICTOR

Examiner

David C. Reese

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-8, 10, 12-14 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 10, 12-14, 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

THIS FINAL ACTION IS RESPONSIVE TO THE AMENDMENT FILED 4/16/2009.

- Claims 9 and 11 are canceled.
- Claims 1, 12, and 19 were amended.
- Claims 1-8, 10, and 12-20 are pending.

Drawings

[1] Figures 1-2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

[2] The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

[3] Claims 1-8, 10, and 12-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 5, 7-8, 10, 21-28 and 30 of copending Application No. 10/511071. Although the conflicting claims are not identical, they are not patentably distinct from each other because they attempt to cover the same subject matter of the blind rivet assembly as shown by fig. 4 of each pending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

[4] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[5] Claims 1-3, 5-8, 10, 12-14, 16-18, and 19-20 are rejected under 35 U.S.C. 103(a) as obvious over Smith GB 2332722, in view of Kubicki, US-2,435,144 or Huck, US-2,030,169, and in further view of Palm, US-5,183,357.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to

a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claims 1 and 12, Smith discloses of a peel type blind rivet assembly comprising:

an elongate tubular body (2) having a shank disposed about a shank axis and a preformed body head (8) at a first end thereof and an expandable portion (16) at the opposed end of the shank remote from the body head, said elongate tubular body defining a mandrel accepting bore/aperture (20) having a constant inner diameter, and an external surface having a constant outer diameter (from claim 12), said body defining a plurality of elongate through slots (12), which slots (12) terminate remote from said first end and increase in width (the width of 12 increases from the outside of 2 to the inside of 2, see the slant, 18, in fig. 1) from an outer surface of the shank toward an inner surface of the tubular body (2); and

a mandrel (4) having a stem extending through and co-axial with said tubular body (2), which mandrel further having a mandrel head (26) having a maximum external diameter greater than the internal diameter of the body (2), said mandrel head (26) having a shoulder portion (32 to the top of 28) defining a perpendicular bearing surface (32 is perpendicular as is the top of 28; both of which are perpendicular to the stem) which is substantially perpendicular to the stem, said perpendicular bearing surface (the perpendicular bearing surface as defined by 32 and the top of 28, is in contact with the opposed end) being in contact with the opposed end, said stem having a first cylindrical portion adjacent the head (30) having a first generally constant diameter and a second cylindrical portion (4) having a second constant diameter greater than the first constant diameter (30).

While the examiner believes that Smith teaches of a perpendicular bearing surface being in contact with the opposed end, if it is held that the bearing surface is not perpendicular (at least where it touches the opposed end); Kubicki, US-2,435,144 or Huck, US-2,030,169 teach of a rivet that possesses a tubular body with a head fitted with a mandrel with a stem, head, and a shoulder portion having a perpendicular surface being in contact with an opposed end of the tubular body. Further, though Smith does show of the slots increasing in width from an outer surface of the shank toward an inner surface of the body; Smith does not expressly state of the slots increasing in circumferential width from an outer surface of the shank toward an inner surface of the tubular body.

With respect to the former issue above, it would have been obvious to one of ordinary skill in the art, having the disclosures of Smith and Kubicki or Huck before him at the time the invention was made, to modify the shoulder of the mandrel head of Smith to have a perpendicular bearing surface in contact with an opposed end of the tubular body, as in Kubicki (fig. 20) or Huck (fig. 3). One would have been motivated to make such a combination because for one such a combination with the shoulder directly against the opposed end of the tubular body allows the female and male members to be positively locked together during assembling thereof, so as to provide a lock which will prevent relative axial movement thereof after the rivet setting operation, as taught by Kubicki or Huck (col. 1-2 of Huck); as well as the user desiring the deformation that accompanies the body when the rivet with such a structure is set within a workpiece. Further, it would have been obvious to a person of ordinary skill in the art to have modified the shoulder of Smith as a person with ordinary skill has good reason to pursue the known options within his or her technical grasp. In turn, because the perpendicular bearing

surface of the shoulder of a head of a mandrel stem as claimed has the properties predicted by the prior art of Kubicki or Huck, it would have been obvious to make the modification to the shoulder of Smith in order to gain the commonly understood benefits and applications of such an adaptation and/or modification.

Secondly, with respect to the latter issue above, that is, of the increase in width being that of a circumferential width, Palm teaches of a rivet assembly similar to that of slots that increase in circumferential width from an outer surface of the shank toward an inner surface of the tubular body (see 17 in fig. 8). Therefore, it would have been obvious to one of ordinary skill in the art, having the disclosures of Smith and Kubicki or Huck and Palm before him at the time the invention was made, to modify the slot of Smith in view of Kubicki or Huck to increase in circumferential width from an outer surface of the shank toward an inner surface of the tubular body as in Palm. One would have been motivated to make such a combination so as to provide a star-shape when pressed apart per the predetermined breaking lines (17) so that an optimum locking of the rivet casing will occur at the back side of a workpiece being riveted (see col. 5, lines 27-53). Further, it would have been obvious to a person of ordinary skill in the art to have modified the slot of Smith as a person with ordinary skill has good reason to pursue the known options within his or her technical grasp. In turn, because the slot as claimed has the properties predicted by the prior art of Palm, it would have been obvious to make the modification to the shoulder of Smith in order to gain the commonly understood benefits and applications of such an adaptation and/or modification.

Re: claims 2 and 13, Smith discloses wherein the opposed end of the shank presents a flat surface (end of “12”) perpendicular to said shank axis (see fig. 1).

Re: claims 3 and 6, 14 and 17, Smith discloses wherein looking at the slope of the bottom edge of the groove, identified as 18 in Fig 1, it is clear the slot increases in length as it extends from an outer surface to an inner surface (see also page 3 lines 7-10 and page 6 lines 1-4).

Re: Claims 4 and 15, wherein a pair of side walls which define said at least one slot are curved (from col. 5 of Palm, "The cross-sectional shape of the predetermined breaking lines (17) can be selected differently. It is therefore possible to form the notches or grooves in a triangular, polygonal, trapezoidal, or circular cross section").

Re: claims 5 and 16, Smith discloses on page 3 lines 21-23 of equally radially spaced slots.

Re claim 7-8, 18: Smith discloses constant thickness of walls along axial length, and that the external diameter of the body is constant along its axial length (see fig. 1).

Re: claim 10, Smith discloses wherein the maximum diameter of the head equal to the OD of the shank (fig. 1).

Re: claim 19, Smith discloses wherein the mandrel stem extends through and is co-axial with said tubular body (Fig 1). The mandrel has a first portion (at 30) disposed adjacent the shoulder, said 1st portion defining a cylindrical surface having a generally constant diameter.

Re: claim 20, Smith discloses wherein said mandrel defines a breakneck 36 defines 3 angled surfaces, (see Fig 1 and compare to applicant's "136" in Fig 3).

Response to Arguments

[6] Applicant's amendment and remarks filed 4/1/11 have been fully considered. Due to the amendment, the Examiner has withdrawn all previous rejections over Smith GB 2,413,135 U.S.C. to further anticipate. Accordingly, the Examiner has withdrawn all previous rejections over Smith GB 2,413,135 U.S.C. to further anticipate.

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2332722, in view of Kubicki, US-2,435,144 or Huck, US-2,030,169. However, upon further consideration of the amended claims, a new ground(s) of rejection is made in view of Smith GB 2332722, in view of Kubicki, US-2,435,144 or Huck, US-2,030,169, and in further view of Palm, US-5,183,357. Consequently, all arguments are considered moot to said new grounds of rejection.

Conclusion

[7] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

[8] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272-7082. The examiner can normally be reached on 7:30 am-6:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached at (571) 272-6987. The fax number for the organization where this application or proceeding is assigned is the following: (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Reese

/D. C. R./
Examiner, Art Unit 3677

/Victor Batson/
Supervisory Patent Examiner, Art Unit 3677